SR 520 Bridge Replacement and HOV Program: SR 520 Pontoon Construction Project Environmental Reevaluation

23 CFR §771.129
Washington State Department of Transportation/Federal Highway Administration

REGION/MODE	SR	PROJECT PROGRAM#	FEDERAL AID #	PROJECT#
ESO Mega Projects	520	852003A	BR0520(043)	U52003A

PROJECT TITLE, ENVIRONMENTAL DOCUMENT TYPE & DATE APPROVED:

1) SR 520 Bridge Replacement and HOV Program: SR 520 Pontoon Construction Project Final Environmental impact Statement, December 2010. Approved by signatory agencies Federal Highway Administration and Washington State Department of Transportation on December 1, 2010.
2) SR 520 Bridge Replacement and HOV Program: SR 520 Pontoon Construction Project Record of Decision, January, 2011. Approved by signatory agency Federal Highway Administration on January 10, 2011.

REASON FOR CONSULTATION:

The need for maintenance dredging associated with the project was disclosed in the Final EIS along with the potential impacts and mitigation measures discussed in the more general context of overall project related dredging activities. The US Army Corps of Engineers has requested NEPA disclosure of additional detail specific to maintenance dredging activities to include details discussed in project permitting documents. Although this additional detail was not explicitly included in the Final EIS or Record of Decision, the nature of the anticipated maintenance dredging activities has not changed from the analyses on which the NEPA/SEPA evaluation of maintenance dredging was based. In addition, the nature of the anticipated maintenance dredging activities is consistent with all Endangered Species Act, National Historic Preservation Act, and Section 4(f) compliance, and permitting documents prepared for the project on file and available for review at the SR 520 Program Office, 600 Stewart St., Suite 520, Seattle, WA 98101, 206-770-3500.

DESCRIPTION OF CHANGED CONDITIONS: (See Attachment 1 for more detailed description).

Maintenance dredging will occur up to six times, once in advance of each pontoon or set of pontoons being launched. During each maintenance dredging event, between 13,000 and 25,000 cubic yards of substrate will be dredged from within the previously constructed launch channel. Each maintenance dredging event is anticipated to take up to 15 days to complete and will be performed only between June 16 and February 28, consistent with Washington Department of Fish and Wildlife in-water work windows. Sediment removed during maintenance dredging through 2015 has been approved for unconfined open-water disposal by the Dredged Material Management Office (DMMO 2010, pers. Comm. Kendall & White 6/15/11) and will be disposed of at approved open-water location(s).

HAVE ANY NEW OR REVISED LAWS OR REGULATIONS BEEN ISSUED SINCE APPROVAL OF THE LAST ENVIRONMENTAL DOCUMENT THAT AFFECTS THIS PROJECT? YES ( ) NO (x) (If yes explain, use additional sheets if necessary)

WILL THE CHANGED CONDITIONS AFFECT THE FOLLOWING DIFFERENTLY THAT DESCRIBED IN THE ORIGINAL ENVIRONMENTAL DOCUMENT. (If yes, attach a detailed summary addressing the impacts and mitigation)

	YES	NO		YES	NO
1) THREATENED or ENDANGERED SPECIES	( )	(x)	5) HAZARDOUS WASTE SITES	( )	(x)
2) PRIME and UNIQUE FARMLAND	( )	(x)	6) HISTORIC or ARCHAEOLOGICAL SITES	( )	(x)
3) WETLANDS	( )	(x)	7) 4 (f) LANDS	( )	(x)
4) FLOODPLAINS	( )	(x)	8) 6 (f) LANDS	( )	(x)

WILL THESE CHANGES RESULT IN ANY CONTROVERSY? YES ( ) NO (x) (If yes explain)

No controversy is anticipated from any of the activities discussed here.

WILL THESE CHANGES CAUSE ADVERSE IMPACTS IN THE FOLLOWING AREAS: (If yes, address comments below)

	YES	NO		YES	NO
1) AIR QUALITY	( )	(x)	7) WATER QUALITY	(x)	( )
2) NOISE	( )	(x)	8) VISUAL QUALITY	( )	(x)
3) LAND USE	( )	(x)	9) NATURAL RESOURCES and ENERGY	(x)	( )
4) TRAFFIC or TRANSPORTATION	( )	(x)	10) PUBLIC SERVICES and UTILITIES	( )	(x)
5) DISPLACEMENT (business or residence)	( )	(x)	11) VEGETATION and WILDLIFE	( )	(x)
			12) RECREATION	( )	(x)
6) ECONOMIC GROWTH and DEVELOPMENT	( )	(x)	13) SOCIAL IMPACTS	( )	(x)

COMMENTS: (See Attachment 1 for more detailed description)

Adverse impacts to water quality and natural resources are expected to be temporary in nature and consistent with those described in the Final EIS.

CONCLUSIONS and/ or RECOMMENDATIONS:

The additional maintenance dredging details noted above and described in Attachment 1 do not change the nature of dredging work associated with the project as analyzed in the Final EIS. The SR 520 Bridge Replacement and HOV Program: SR 520 Pontoon Construction Project remains compliant with current federal, state, local, and departmental regulations and directives with regard to National Environmental Policy Act (NEPA)/State Environmental Policy Act (SEPA) processes. This reevaluation document, along with supporting information, ensures disclosure under NEPA of additional dredge activity details as described in various project permit documentation and reiterates that there would be no new significant adverse impacts resulting from this activity as disclosed in the Final EIS signed in December, 2010, and the Record of Decision signed in January, 2011.

I concur with the conclusions and recommendations above

Region / Mode Official

Date 8/2/11

FHWA Official

Date 8/2/11

ATTACHMENT 1

Environmental Reevaluation/Consultation Form for SR 520 Bridge Replacement and HOV Program: SR 520 Pontoon Construction Project Final Environmental Impact Statement, approved on December 1, 2010, Record of Decision signed on January 10, 2011

Description of Changed Conditions (Additional Maintenance Dredging Activity Details) and Effects as Compared to the FEIS and ROD:

This additional dredging detail was not explicitly included in the Final EIS or Record of Decision; however, the nature of the anticipated maintenance dredging activities has not changed from the analyses on which the NEPA/SEPA evaluation of maintenance dredging was based. In addition, the nature of the anticipated maintenance dredging activities is consistent with all Endangered Species Act, National Historic Preservation Act, and Section 4(f) compliance, and permitting documents prepared for the project on file and available for review at the SR 520 Program Office, 600 Stewart St., Suite 520, Seattle, WA 98101, 206-770-3500.

The bottom of the launch channel will initially be dredged to approximately 138 feet wide, 430 feet long, and at least 13 feet below MLLW (with up to a 2-foot overdredge). Maintenance dredging will occur up to six times over the course of the project to maintain adequate launch channel depth to accommodate pontoon float-out, once in advance of each pontoon or set of pontoons being launched. During each maintenance dredging event, between 13,000 and 25,000 cubic yards of substrate will be dredged from within the previously constructed launch channel. The number of maintenance dredging events and the amount of substrate removed during each event will be driven by sedimentation rates in the launch channel which cannot be predetermined. Each maintenance dredging event is anticipated to take up to 15 days to complete and will only be performed between June 16 and February 28, consistent with Washington Department of Fish and Wildlife in-water work windows.

Dredging methods will be limited to the use of an environmental clamshell bucket, when possible, and a standard clamshell when necessary to clear debris and obstructions. The following practices will be followed:

- No fuel, garbage, or debris will be allowed to enter the harbor from the dredge, receiving barge, or other vessels associated with the project.
- Each passing of the dredge bucket will be complete (the bucket does not return to the water without depositing its full load in the hopper or other receiving container).
- No material will be stockpiled on the harbor bottom or below the OHWM (i.e., each time the bucket is closed it will be brought to the surface and emptied onto a barge).
- All floatable material resulting from construction activities will be collected and disposed of upland.

- All existing debris or other deleterious materials resulting from dredging activities will be removed and disposed of upland such that it does not enter waters of the state.
- Barges and other floating equipment will be operated to avoid grounding at any time.
- All vessels associated with the project will be operated to minimize nearshore propeller-wash impacts such as suspension of nearshore sediments.
- Water quality monitoring will be conducted during dredging to ensure that water quality is not affected. If water quality monitoring indicates exceedances of water quality standards within 300 feet of the activity, per permit conditions, then additional dredging BMPs will be implemented. These BMPs may include slower dredge bucket deployment and retrieval, and pausing of the dredge bucket at the water surface to release excess water.
- Receiving barges will not be filled beyond their capacity to completely contain the dredged material, including all captured water. Any return flows to waters of the state will be controlled with the appropriate BMPs around the perimeter of the barge to minimize a discharge of turbid water. BMPs that will be implemented during barge dewatering include:
    - The bucket will be required to pause for several seconds at the water surface during retrieval to release excess water.
    - The bucket will be completely emptied of sediments over the barge before being re-submerged.
    - Return water draining from the receiving barge will be filtered through straw bales before returning to the waterway.
    - Straw bales will be changed as necessary to ensure that the filtration system remains intact and able to perform.
    - Barges will not be overfilled or allowed to overflow directly back to the waterway.
    - During sediment dewatering, the receiving barge will remain within the work area.
    - Return water from the barge will not be allowed to discharge to open water outside the work area.
- Equipment shall be turned off when not in use.
- Only well-maintained and properly functioning equipment and vehicles shall be used.

The sediments in the launch channel footprint prior to its initial dredging were characterized according to the Dredged Material Management Program procedures (DMMO 2010). Sediment removed during initial launch channel construction as well as any sediment removed during maintenance dredging through 2015 has been approved for unconfined open-water disposal by the Dredged Material Management Office (DMMO 2010, pers. Comm. Kendall & White 6/15/11: email communication between Scott White, SR 520 Bridge Replacement and HOV Program Permit Lead, and David R. Kendall, Ph.D., Chief, Dredged Material Management Office, Seattle District, US Army Corps of Engineers. [on file with SR 520 Bridge Replacement and HOV Program Office]) and will be disposed of at the approved Point Chehalis and/or South Jetty dispersive open-water disposal site(s) located near the mouth of Grays Harbor. Disposal will be conducted in accordance with procedures approved by the Washington Department of Natural resources (DNR) under the Site Use Authorization process. Copies of the permits for any offsite disposal facility will be obtained prior to dredging. Any further dredging activity

conducted beyond 2015 may require additional sampling and analysis as required by the DMMO to determine disposal suitability.

Potential Adverse Impacts to Water Quality:

Maintenance dredging has the potential to temporarily adversely impact water quality by increasing turbidity across a localized area, within 300 feet of the dredge head; but, under the project's water quality monitoring and protection plan and 401 Water Quality Certification, would remain in compliance with applicable regulations and not have a significant adverse impact to the water quality of Grays Harbor. The highest turbidity is anticipated to reach up to or exceed 300 NTUs at the dredge head, and be less than 10 NTUs/20% above background levels based on water quality observations collected during US Army Corps of Engineers (USACE) dredging of the federal navigation channel in the vicinity of the project's launch channel performed in February, 2006 (ICF Jones & Stokes 2008). Water quality effects beyond 300 feet are unlikely to be distinguishable from ambient conditions and, therefore, are insignificant.

Turbidity will be monitored during maintenance dredging activity and, if maintenance dredging is conducted during periods of periods of critically low oxygen (August 1 - October 31), dissolved oxygen levels will be monitored. Under WAC 173-201A-612 designations for marine waters, Grays Harbor at the Aberdeen Log Yard site is considered "good" quality for aquatic life uses. The water quality monitoring turbidity criteria applicable to the casting basin site that meet the requirements of the project's 401 Certification are as follows:

- No more than 10 NTUs over background if turbidity is 50 NTUs or less (per WAC 173-201A-210(1)(e))
- No more than 20 percent over background if turbidity is greater than 50 NTUs (per WAC 173-201A-210(1)(e))

By meeting the WAC and 401 Certification criteria listed above, the Project will be in compliance with USFWS Biological Opinion turbidity conditions, including the requirements in the Biological Opinion that are based on measurements taken at a distance of 750 feet. The only exception to these requirements is the following:

- If background turbidity is greater than 110 NTUs, turbidity at the point of compliance (300 feet) may not be more than 22 NTUs over background (2010 USFWS).

The Project will also be in compliance with the National Marine Fisheries Service (NMFS) Biological Opinion, which states that dredging would either result in no effect or effects that are likely to be insignificant (2010, NMFS).

Per the 401 Water Quality Certification, if a compliance turbidity exceedance occurs, confirmational turbidity monitoring at the background and compliance monitoring locations will be performed to verify the initial exceedance and to determine if there has been a change in background turbidity levels. If the

exceedance is confirmed at the point of compliance (e.g., for dredging 500 feet down current from the project area), work will stop and corrective actions will be implemented. The Washington Department of Ecology (Ecology) will be contacted within 24 hours per the 401 Certification Section A.3 and C.7. If an exceedance is confirmed at the point of compliance, monitoring will also be conducted at a location of 750 feet down current from dredging operations for notification to USFWS.

The dissolved oxygen criterion for launch channel maintenance dredging will be no less than 5.0 mg/L based on WAC 173-201A-210(1)(d) criterion for marine waters of "good" quality for aquatic life.

If water quality exceedances are measured, background levels and the exceedance will be verified, Ecology and Washington Department of Fish & Wildlife (WDFW) will be notified, and corrective measures will be immediately implemented. Corrective measures may include:

- Pausing operations to confirm that dredging environmental buckets are properly functioning.
- Modifying dredge procedures, including:
    - Changing dredge buckets to an environmental bucket if a standard clamshell bucket is required for use given obstructions/hard digging conditions.
    - Slowing or otherwise revising dredge rates.
    - Modifying dewatering procedures.
- Other corrective actions as may be identified through examination of the work practices and conditions.

If distressed or dying fish are observed or water quality exceedances are detected after corrective measures have been implemented, dredging activities will cease and Ecology and WDFW will be notified.

Potential Adverse Impacts to Natural Resources:

Benthic surveys of preconstruction intertidal mudflats conducted as part of the site investigation process indicate low prey densities in this area (Parametrix 2009). Observed macrofauna species were limited to softshell clams (*Mya arenaria*) and bloodworms. Launch channel construction is expected to result in a reduction in benthic organisms within the launch channel; however, many of the displaced species have rapid recolonization rates and are expected to recover rapidly. Subsequent disturbance during maintenance dredging for the launch channel will likely limit recolonization by mature long-lived non-mobile species. Habitat effects resulting from repeated disturbance maintenance dredging within the launch channel are anticipated to be minimal; first, because maintenance dredging would occur entirely within the channel constructed as part of the project, and second, the launch channel is located in a dynamic environment adjacent to a federally maintained navigation channel that is routinely dredged at least annually for maintenance.

Conclusion:

The additional maintenance dredging details described here do not change the nature of dredging work associated with the project as analyzed in the Final EIS and Record of Decision. The SR 520 Bridge Replacement and HOV Program: SR 520 Pontoon Construction Project remains compliant with current federal, state, local, and departmental regulations and directives with regard to National Environmental Policy Act (NEPA)/State Environmental Policy Act (SEPA) processes. This reevaluation document, along with supporting information, ensures documentation under NEPA/SEPA of additional dredge activity details as described in various project permit documentation and reiterates that there would be no significant adverse impacts resulting from this activity as disclosed in the Final EIS signed in December, 2010, and the Record of Decision signed in January, 2011.

References:

Dredge Material Management Office (DMMO). 2010. Determination on the Suitability of Characterization of Proposed Dredged Material from WSDOT SR-520 Pontoon Construction Project (NWS-2008-151) at the Aberdeen Log Yard, Grays Harbor, Washington. 5 August (errata correction 10 August).

ICF Jones & Stokes. 2008. Water Quality Monitoring Report. Grays Harbor Dredging Project. U.S. Army Corps of Engineers. October.

National Marine Fisheries Service. 2010. Endangered Species Act – Section 7 Consultation Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation, SR 520 Pontoon Construction Project, Grays Harbor, HUC 17100105, Grays Harbor County, Washington. October.

Parametrix. 2009. Final Mudflat Surveys for Potential Grays Harbor Pontoon Construction Sites Technical Memorandum. Prepared for the Washington State Department of Transportation. October 2009.

U.S. Fish and Wildlife Service. 2010. Endangered Species Act - Section 7 Consultation Biological Opinion, State Route 520 Pontoon Construction Project, Grays Harbor and King Counties, Washington. Reference: 1 3410-20 1 0-F-0497. December.